

## 7 Driveshaft and Brakes



### Complete Subframe Packages

- Front subframe unit with suspension and running gear, rubber mounted 1976-96 complete as shown, ready to bolt on. . . . . **HMP241001**
  - As above but with subframe for twin point front mounted radiator 1996 on . . . . . **HMP241003**
- Rear subframe unit with suspension and running gear to fit any year (no brake limiter valve for early cars) single line brake cable as fitted 1976 on. . . . . **HMP241002**



### Driveshafts

A full range of upgraded and replacement driveshafts are available for every known requirement. Specials can be made to order. The picture shows the driveshafts often used on the original ST Abingdon works cars and Monte Carlo Rally cars. Problems of shaft breakage were overcome by not machining the large CV Joint retaining collar recess. In its place a collar was welded on to locate the CV Joint. The ST works also reduced the steering lock to eradicate over stressing of the shaft on full lock.

- The driveshaft with collar for pre-pot joint gearboxes when Hardy Spicer joints or rubber couplings are used. Sold in pair . . . . . **C-BTA1267**
  - The same collared driveshafts but for pot joint gearboxes with inboard CV Joints (Pot Joints). Sold in pair . . . . . **C-BTA1268**
- Upgraded steel driveshafts with circlip grooves but upgraded to stop ends twisting are available for both pot joint and remote type. (not shown).
  - For remote type. Sold in pair . . . . . **C-BTA1265**
  - For pot joint type. Sold in pair . . . . . **C-BTA1264**
- For grass track racing or other extremely destructive usage a pair of larger diameter driveshafts are available. **CALL for details.**
- Standard replacement driveshafts but upgraded to EN24WX to enable performance usage Available individually (Not shown).
  - For pre pot joint Mini, Autos and 'S', R/H . . . . . **27H4775**
  - For pre pot joint Mini, Autos and 'S', L/H . . . . . **27H4776LFT**
  - For pot joint Mini, R/H. . . . . **MS1246**
  - For pot joint Mini, L/H. . . . . **MS1247**



- Ultra reliable and a direct replacement for standard units these are made in aircraft spec material and are used by most current international Race and Rally teams. Due to stresses caused by machine cutting, all the splines are rolled. Eliminating spline lock and allowing free plunge in the inner joint results in better handling and less torque steer. The mechanical efficiency is greater than a pot joint, let alone a Hardy Spicer joint, thus reducing power losses and therefore maximising the potential of your engine. Special order only. Call for details.

### Swivel Pin Kit

- Top and bottom swivel pin kit for one side only. Spring fits lower pin. All other parts are the same top and bottom either side.
  - Genuine. . . . . **GSJ166**



Each set is enough to do one hub only.

### CV Joint & Gaiter Kits

- CV Joint for Cooper and all drum brake Minis. 1/8" nut . . . . . **17H8600**
- Constant velocity joint, 'S' GT or any Mini 1984 on. 1 5/16" nut size. Sold individually . . . . . **GCV1013**
- CV gaiter kits. With plastic clips & grease. Order individually.
  - Universal kit. Fits any CV . . . . **18G9027MS**
  - Genuine kit. For GCV1105 small joint. . . . . **GDG233**
  - Genuine heavy duty kit with metal clips & grease. For GCV1013 large joint. . . . **GSV1053**
- Driveshaft small yoke end gaiter pre pot joint. . . . . **18G9029**



### Alloy Calipers

#### FOUR POT 6082T6 Alloy billet calipers

The advantage of alloy calipers is that they dissipate heat quicker, reducing fluid boiling. Now fitted with stainless steel pistons which albeit, have added 0.54g to the weight, they further improve performance by reducing heat transfer to brake fluid, also providing much longer life expectancy against corrosion, especially on road cars. The design of the caliper also helps expel pad dust and heat from the contact area. By using standard metro pad sizes which are larger and by virtue of 2 pistons both pushing against the pad, it controls the pad contact and brake efficiency.

- Pair of 4 pot alloy calipers to fit 7.5" diameter brake discs where 10" wheels are used. The pads have to be modified by grinding/filing off a small corner section of the metal on two pads only which does not affect the quality on this fitment. The kit contains 1 pair of calipers, plus longer hub bolts and a set of retaining clips and pins for the pads. Brake pads are NOT included owing to customers different requirements. **Black pair. . . . . C-AJJ4023**

- Pair of 4 pot calipers for use with 8.4" diameter brake disc and 12", 13" wheels. Kit contains 1 pair of calipers with retaining clips and pins. Brake pads are NOT included owing to customers different requirements. **Black pair . . . . . C-AJJ4022**

- The fitting kit for either set of calipers when using vented brake discs from the Metro. The brake disc will obviously require machining down from 8.4" to 7.5" for use on 10" wheels for C-AJJ4023 calipers. Complete with 4 spacers (only black available) and correct retaining clip and pins . . . . . **C-AJJ4021**

#### WEIGHT COMPARISONS

4 piston alloy caliper	1.8kg
'S'/1275GT caliper	2.66kg
Late Mini caliper (post 85)	3.46kg
4 piston iron caliper	3.48kg





## Caliper Pistons / Seals

1. Caliper pistons in 303S stainless steel. Centerless ground for micro finish to stop sticking, not a mass produced cheap gimmick.

	Order each piston individually	Caliper seal repair kit per caliper
a. For 997/998cc Cooper 7" disc	17H7913	8G8587
b. Cooper 'S' 1275GT 7.5" disc	17H8626	8G8830
c. Mini 1984 on 8.4" disc	17H7960	M2601
d. Metro and Mini Spares 4 pot caliper	SAAS1022	GRK5003

## Brake Shields & Shoes

2. Right hand pair of disc shield covers.

a. Pair of 7.5" covers	MMKT0531
b. Pair of 8.4" covers	HMP441032

3. Left hand pair of disc shield covers.

a. Pair of 7.5" covers	MMKT0531
b. Pair of 8.4" covers	HMP441033

4. Shield to hub steady bracket.

a. R/H	BTA1208
b. L/H	BTA1209

5. Protector plates for protecting hose to calipers as used on works cars. Sold as a pair. C-AJJ3369

6. Brake Shoes in axle sets of four.

a. 1 1/2" wide front brake shoes (4)	GBS102MS
b. 1 1/4" wide rear brake shoes (4)	GBS101MS
d. 1 1/4" wide rear brake shoes(4) genuine.	GBS834AF

## Master Cylinders

7. Original Lockheed metal type canister master cylinders. "Lockheed made in England" is embossed into the surface, as supplied by the factory. Pre 1976.

a. Clutch master cylinder for all Mini	GMC1008
b. Brake master cylinder for standard Mini 2.25" high canister	GMC171-ORIG
c. Brake master cylinder for Cooper S/1275GT larger fluid tank 3" high canister	GMC172
d. Master cylinder reservoir extension. Made in translucent white nylon, enabling quick and easy fluid level checks. Also allows extra fluid to be carried.	BHA4661

8. Plastic container larger capacity type master cylinders.

a. For brake. Pre 1976	GMC171
b. For clutch. All models	GMC1008

9. Brake master cylinder front to rear split. With yellow identity band. Pre 85 cars require metric union brake pipe kit.

a. Master cylinder 1976-89	GMC227
b. Brake pipe kit R/H drive	BAU5654
c. Brake pipe kit L/H drive	BAU5655

10. Brake master cylinder for cars with factory built in servo. 1989 on... GMC90376

## Brake Pads - Unipart, Rover, Mintex, Carbon Metallic and EBC

The Mintex C-TECH range is ideal for upgrading brakes when fade occurs. The center groove in the pad is to stop dust build up. Also available is carbon metallic compound with its broad operating temperature band encompasses everything from M171, DS11 and M1155. Exceptional co-efficient of friction, combined with a low wear rate make these a must for all racers.

Dupont Kevlar that will stop you faster, fade resistant with immediate pedal response. (No warm up time required) Not only do they give low brake disc wear the non-asbestos kevlar produces less brake dust, which usually contaminates alloy wheels. If you have alloy wheels EBC Pads are a must.

	Unipart/Rover, Standard Material (*except where shown)	C-TECH M1144 Material	Carbon Metallic Material	Black Stuff Kevlar Street Pads for Road/Fast Road Use.	Green Stuff Kevlar for Competition, Fast Road light race/rally. Known as roadport.
7" Diameter Disc 998cc Cooper only	GBP102 	C-AHT223 	N/A	N/A	C-AHT223GREEN 
7.5" Diameter Disc Cooper 'S', 1275GT	GBP103 	C-8G8995 	C-8G8993 	GBP103-KEVLAR 	GBP103-GREEN 
8.4" Diameter Disc Late Mini	(Lockheed) GBP281 	C-AHT16 	N/A	GBP281KEVLAR 	C-AHT16KEVLAR 
Vented Disc Metro/Mini	(Mintex) GBP258 	C-8G8994 	C-STR987 	GBP258ULTIMAX 	C-8G8994GREEN 





### 7" Brake Discs

1. Cooper 7" diameter brake disc. Sold individually ..... **BTA193**
2. a. Brake pads for 7" discs. .... **GBP102**  
b. Kevlar brake pads for 7" discs ..... **C-AHT223**



### 7.5" Brake Discs

3. a. Brake discs 7.5" diameter from upgraded material. Sold individually ..... **GBD101**
4. 7.5" Brake disc with grooves to wipe brake pad clean to improve contact area and efficiency. Sold individually ..... **C-21A1265**
5. Vented brake disc machined down to 7.5" for use with 4 pot callipers. Call for details.
6. a. Drive flange in upgraded EN24T to reduce wear and cope with extra stress. .... **21A1270**  
b. Drive flange in standard material EN8 ..... **21A1270MS**



### 7.5" Disc Conversion Kits

7. Complete Cooper 'S' 7.5" diameter disc brake kit for converting from drum brakes to discs.

	Brake Pads	Calipers	Brake discs <b>21A1265</b>	Drive Flange <b>21A1270MS</b>	CV Joint <b>GCV1013</b>	Hub Front RH/LH <b>FAM6618 - FAM6619</b>	Roller Bearing <b>GHK1140</b>	Hub Nut Split Washer <b>FAM9270</b>	Swivel pin Kit <b>GSJ166-MS</b>	Grease nipple <b>UHN400</b>	Countersunk Screw <b>SF604051</b>	Bolts & Pins <b>53K1048 &amp; PS610241</b>	Steering Arm Locktab <b>2K5377</b>	Brake Disc Covers <b>21A1271</b> <b>21A1272</b> <b>21A1273</b> <b>21A1274</b> <b>BTA1209</b>
Complete Kit <b>C-AJJ4028</b>	<b>GBP103-GREEN</b>	<b>27H4656</b> <b>27H4657</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
Complete Kit with non genuine calipers <b>C-AJJ4028MS</b>	<b>GBP103-GREEN</b>	<b>27H4656MS</b> <b>27H4657MS</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
Complete Kit with brake disc shields	<b>GBP103-GREEN</b>	<b>27H4656</b> <b>27H4657</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Uprated Kit with 4 pot Alloy calipers & parts	<b>GBP258</b>	<b>C-AJJ4023</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗
Disc, Flange, Caliper Kit from 12" to 10" wheels <b>MSSK013</b>	<b>GBP103-GREEN</b>	<b>27H4656</b> <b>27H4657</b>	✓	✓	✗	✗	✗	✗	✗	✗	✓	pins only	✗	✗

### 8.4" Brake Disc

8. a. Budget non vented disc only as fitted to all Minis 1984 on. As supplied in above kit. Sold individually ..... **21A2612**  
b. Standard non vented disc only as fitted to all Minis 1984 on. High quality. Sold individually ..... **21A2612MS**
9. Drilled and slotted non vented performance use. Sold in pair..... **C-21A2612**



10. a. A car set of 8.4" Diameter vented brake discs and Kevlar pads. .... **MS39**  
b. Vented brake discs only. Sold individually ..... **GBD496**
11. Drilled and slotted vented type for performance use with 4 pot calipers. 8.4" disc. Sold in pair..... **C-GBD496**
12. a. Drive flange, non vented discs upgraded EN24T. .... **21A2695**

### 8.4" Disc Conversion Kits

13. 8.4" diameter disc brake kit for converting to vented discs.

	Brake Pads	Calipers reconditioned	Brake discs <b>GBD496</b>	Drive Flange <b>21A2695</b>	CV Joint <b>GCV1013</b>	Hub Front RH/LH <b>FAM2390/1</b>	Roller Bearing <b>GHK1140</b>	Hub Nut Split Washer <b>FAM9270</b>	Swivel pin Kit <b>GSJ166-MS</b>	Brake Hoses <b>C-AJJ4024</b>	Caliper & Drive Flange Bolt <b>53K1048 &amp; ADU6472</b>	Hub Seal Inner & Outer <b>GHS173 &amp; GHS101</b>	Brake Pad Clips & Pins <b>GBK1025</b>
Disc Upgrade Kit to vented discs <b>C-AJJ4029</b>	<b>GBP258 ULTIMAX</b>	<b>GBC132</b> <b>GBC131</b>	✓	✓	✗	✗	✗	✗	✗	✓	✓	✗	✓
Complete vented disc kit <b>C-AJJ4029A</b>	<b>GBP258 ULTIMAX</b>	<b>GBC132</b> <b>GBC131</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓





### Brake Lines

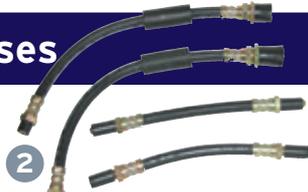
1. **Easy bend non rusting brake pipe kits**, all pipes are sold separately if requested. Also available in L/H drive, change GB prefix to GL.
  - a. **Single line, dry suspension, disc or drum brakes, no servo, 1959 on**..... GB4991
  - b. **Single line, dry suspension, disc brakes with servo, Cooper 'S' & 1275GT etc** . GB4992
  - c. **Front to rear split, no servo, 1980-88 approximately** ..... GB4999
  - d. **Front to rear split, no servo, 1980-88** ..... GL5008
  - e. **Single line, hydrolastic suspension, disc or drum, no servo.** ..... GB5001
  - f. **Single line, hydrolastic suspension, disc brakes, with servo, Cooper 'S'**..... GB5002
  - g. **Diagonal split system van/estate 1978 on** ..... GB5007



### Rubber Brake Hoses

2. **Rubber brake hose sets.**  
Front & rear hoses are sold individually or buy a full car kit of 2 front & 2 rear hoses.
 

	Front Hose	Rear Hose	Full Car Kit
a. <b>Drum brake Mini. (longer front hoses).</b>	GBH170	GBH173	MMKTO516
b. <b>Disc brake Mini.</b>	GBH174	GBH173	MMKTO517



### Steel Braided Brake Hoses

Steel braided brake and clutch hoses have a PTFE inner which helps to eliminate the spongy pedal feel under arduous conditions, and giving greater efficiency. The outer braided stainless steel cover minimises wear/damage and corrosion. All our braided hoses now have swaged ends to conform to Japanese, New Zealand and South African safety requirements.

3. a. **Set of 4 brake hoses 2x front and 2x rear brake hoses** ..... C-AJJ4026  
 b. **Set of 5 hoses, kit as above but with clutch hose included for pre Verto.** ..... C-AJJ4027  
 c. **Set of 5 hoses, kit as above but with clutch hose included for Verto only.** ..... C-AJJ4027B  
 d. **Pair of front braided hoses only.** ..... C-AJJ4030  
 e. **Pair of rear braided hoses only.** ..... C-AJJ4031
4. **Pair of rear hoses with banjo fitting.**  
These replace the original hose and metal brake pipe fitted to the wheel cylinder. No modifications are required and are of special interest to owners of severely lowered cars where pipes can get crushed. The kit contains the banjo bolts to fit the wheel cylinder and tie wraps to hold hose to radius arm..... C-AJJ4031B
5. **Braided clutch hose for pre Verto clutches**  
C-AJJ4025
6. a. **Banjo type braided clutch hose for Verto clutches** ..... C-AJJ4025B
7. **Braided one piece long clutch hose.**  
Replaces existing rubber hose and metal pipe. For Verto or Pre Verto.  
 a. **R/H Type** ..... C-AJJ4025COMPLH  
 b. **L/H Type.** ..... C-AJJ4025COMPLH
8. **Set of braided hoses for Metro 4 pot calipers when converting for use on a Mini** ..... C-AJJ4024



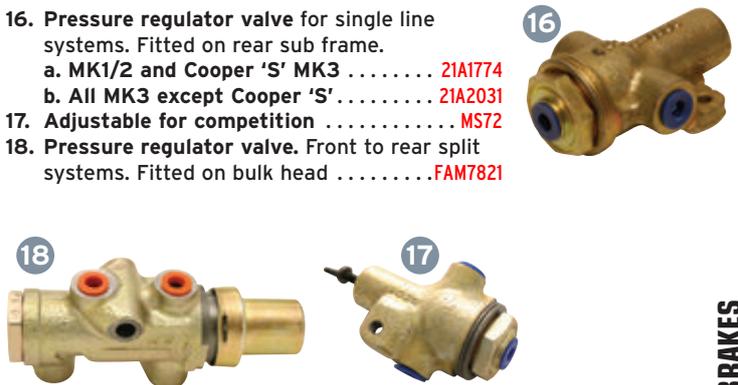
### Servos

9. **This is the only remote servo available for the Mini from Lockheed.** Available in a kit with full fitting instructions it is the same servo as fitted to the Cooper 'S' MK3 and 1275GT, but can be fitted to any single line brake system from 1959 on.
  - a. **Servo Kit with brackets** .... 13H7940
  - b. **Servo only** ..... 13H7939
  - c. **Cooper 'S' fitting brackets only (not in kit)** ..... 21A2254
  - d. **The original repair kit for SEN43 or 13H7939 servo** ..... LSSB1073
10. **This is not the original Cooper S MK1 Lockheed type, but a close copy that has been reproduced for customers who require the authentic look without using the MK3 'S' Lockheed Servo that was previously the only one available.** ..... 21A1293
11. a. **Servo that only bolts to GMC90376 master cylinder as fitted by Rover from 1989 on with split front to rear brakes, which had different pedal box linkage etc** ..... GSM119  
 Note: See item 15 for braided hoses.  
 b. **Repair kit for GSM119.** ..... GSM120
12. **Servo fitting kit is for all single line brake pipe cars when using 13H7939 servo.** When this kit is used in conjunction with this servo it makes the set up that was used on the Cooper 'S' MK3. . . . . MSSK7
13. **The Servo fixing brackets are also available separately, as a pair**
  - a. **MK3 fixing brackets, as shown. Only fits 13H7939 MK3 Servo.** . . . . . 21A2254
  - b. **MK1/2 fixing brackets. Only fits 21A1293 or original Servo.** ..... 21A1294
14. **In-line valve required to stop gas coming back into the servo. This is not supplied in the Lockheed servo kit. If the servo has a built in valve this is also required in the hose line to ensure against contamination** 17H2646
15. **A pair of braided servo hoses and fittings are for cars from 1989 where the servo is fitted to the brake master cylinder as standard. Once fitted the servo can be moved to one side as required to gain access for work on the clutch, engine mounting or stabiliser bar without the necessity of having to remove the pipes and bleed the system. Great idea!** ..... SEN45



### Pressure Regulator Valves

16. **Pressure regulator valve for single line systems. Fitted on rear sub frame.**
  - a. **MK1/2 and Cooper 'S' MK3** ..... 21A1774
  - b. **All MK3 except Cooper 'S'** ..... 21A2031
17. **Adjustable for competition** ..... MS72
18. **Pressure regulator valve. Front to rear split systems. Fitted on bulk head** ..... FAM7821





## Drum Brake Components

1. **Rear brake backplate.**  
Rear backplates are sold less adjuster screw and wedges. If the small wheel cylinder-locating hole is on the opposite side another hole should be drilled rather than removing the pin from the cylinder.  
a. For R/H.....**21A1058**  
b. For L/H.....**21A1060**
2. **One adjuster & 2 wedge kit** **17H7620**  
a. **One adjuster only** .....**17H7619**  
b. **Single wedge only** .....**17H7618**
3. **Gaiter for backplate and brake lever arm** .....**17H7612**
4. **Car set of 4 rear brake shoes return spring** .....**BRAKE02**
5. **AP/Rover wheel cylinder, which includes gasket and clip (items 6 & 7).**  
a. **Rear cylinder with .75" Internal bore size. Genuine Part** ..... **GWC1102**  
  
b. **Rear cylinder with .625" Internal bore size. Genuine Part** .....**GWC1101**
6. **Rear wheel cylinder locating gasket** ..... **37H4642**
7. **Rear wheel cylinder clip** ..... **Order as 17H7949**



37H4642  
Order as 17H7949

8. **Front brake backplate for cars with two wheel cylinders per backplate from 1968 on are made with the adjuster in place.**  
a. **For the R/H Backplate** ..... **37H2013**  
b. **For the L/H Backplate**..... **37H2014**
9. **Car set (4) front brake shoe return springs** ..... **GBK1733**
10. **AP/Rover wheel cylinders includes gaskets (item 11).**  
a. **For R/H Cylinder .9375" bore. Genuine Part**.....**GWC126**  
b. **For L/H Cylinder .9375" bore** ... **GWC127**

11. **Front wheel cylinder locating gasket** ..... **37H3833**
12. **Wheel cylinder spring (4) to brake shoe must be fitted to ensure braking efficiency are available separately.** ..... **27H3753**



13. **Alloy brake drums - pair, with built in spacer and by virtue of its finned design dissipates heat quicker which in turn helps reduce brake fade.**  
a. **Superior quality**.....**SUPERFINS**  
b. **Budget pair**.....**MINIFINS**
14. **Standard cast mini brake drum for front or rear. Sold individually** ..... **21A22**
15. **Rear cast brake drum as fitted to Cooper 'S' 1275GT and all Mini's from 1984 on. Characterised by the built in spacer. Sold individually** . **21A1279**



## Built Up Brake Backplate

16. **Built up brake backplate kits for rear includes backplates with adjusters, cylinders and shoes as shown.**  
a. **For rear R/H** ..... **21A1058KIT**  
b. **For rear L/H** ..... **21A1060KIT**

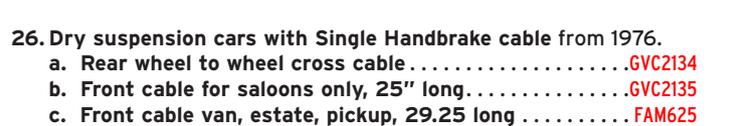


## Handbrake

17. **Fly off handbrake conversion so popular in the 60's and commonly used on rally cars. The only parts supplied are the new pawl pictured and two rivets, with full fitting instructions** ..... **C-AJJ4019**
18. **Original type handbrake plastic grip. Pre 1976** ..... **13H5541**
19. **Rubber handbrake grip. 1976 on** ..... **FAM8356**
20. **Handbrake Black Vinyl gaiter.** ..... **CK989A**
21. **Light weight handbrake cable quadrants for dry suspension. Pre 1976. Sold as Pair** ... **C-AJJ4018**
22. **Original handbrake cable quadrants for dry suspension. Pre 1976. Sold individually.**..... **21A2454**



23. **Handbrake cable sector bracket 1976 on.** ..... **FAM621**
24. **Fixing pin for quadrants** ..... **CLZ549**
25. **Cars with Twin Handbrake cables pre 1976.**  
a. **Van, Estate and Pickups only. Sold individually** ..... **GVC1020**  
b. **Hydrolastic suspension cars only. Sold individually** ... **GVC1021**
26. **Dry suspension cars with Single Handbrake cable from 1976.**  
a. **Rear wheel to wheel cross cable** ..... **GVC2134**  
b. **Front cable for saloons only, 25" long** ..... **GVC2135**  
c. **Front cable van, estate, pickup, 29.25 long** ..... **FAM625**



## Valve Caps

27. **Alloy Tire Valve Caps.**  
Available in four anodised colors.  
Order Set of 4 as ..... **MTC3** ..... **MTC4**..... **MTC5**..... **MTC6**



## Locknuts

28. a. **Set of 4 locking nuts for latest Mini/Cooper 8 Spoke Alloy.** ..... **LOCKNUT1**  
b. **Set of 4 locking nuts for Mamba/Revo 10" wheels.**.. **LOCKNUT2**  
c. **Set of 4 locking nuts for Minilife/Original Minilite Wheel Pre 1980** ..... **LOCKNUT3**  
d. **Set of 4 locking nuts for 13" RFX/Phoenix/Superlite large radius seat CN5 nut** ..... **CN5**  
e. **Set of 4 locking nuts, Mini 12" steel - 1984 on, Wella CN2/5-type.** ..... **LOCKNUT5**  
f. **Set of 4 locking nuts, Mini 10" steel - Pre 1984. GB alloys CN1/4-type** ..... **LOCKNUT6**



## Brake Drums

13. **Alloy brake drums - pair, with built in spacer and by virtue of its finned design dissipates heat quicker which in turn helps reduce brake fade.**  
a. **Superior quality**.....**SUPERFINS**  
b. **Budget pair**.....**MINIFINS**

